

REMARKS

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheppard et al., U.S. 6,061,102 in view of Foley et al., U.S. 5,510,851.

Claims 1-7 are pending in the application.

Reconsideration and allowance of the claims is requested for the following reasons.

The present invention is directed to an improved method of correcting pixel by pixel variations in a display, including the steps of creating a defect map of pixel intensity offsets for the display; correcting an input signal according to the defect map; and displaying the corrected input signal on the display, wherein the improvement comprises; creating the offset defect map by displaying a single pixel or a cluster of pixels, modulating them at a predetermined rate (i.e., not modulating them with a lens or with a color) and sensing their intensity via a detector that is synchronized with the modulation. Additionally, the present invention employs the sensed intensity and the predetermined intensity to generate a correction offset.

The examiner asserts that Sheppard et.al discloses the Applicant's claimed features found in claim 1(a):

"a) the claimed modulating a pixel is met by projector lens assembly..."

In reality, the examiner confuses color modulation as taught by Sheppard with the temporal modulation frequency claimed by the Applicant. The applicant clearly and distinctly claims modulating a pixel at a predetermined rate, which is inherently different than modulating the pixels with a lens or with a color as taught by Sheppard.

On another note, the examiner acknowledges that Sheppard does not disclose Applicant's claimed feature of using a photosensor to sense the display and generate a sensed signal. Instead the examiner states that it would have been obvious to replace the Sheppard's with a photosensor as taught by Foley. In fact, the light intensity collected by a photosensor imaging a screen that is displaying a single pixel is not obvious, and only using Applicant's claimed method of synchronous demodulation is it possible to extract such a low light

level in the presence of ambient light. Consequently, the present invention's use of temporal modulation, at a predetermined rate, of individual pixels; and detection using a synchronous demodulator is not an obvious improvement; but it does produce the unexpected result of a drastic simplification of the system and improved accuracy.

Moreover, the photosensor described in Foley is not comparable to the photosensor of the present invention. Foley describes a grid of photosensors, each of which images a section of a screen, much like the CCD of Sheppard. Foley's grid of photosensors differs from a single photosensor that images the entire screen, and a synchronized display/sensor mechanism that collects the light of a single pixel. In contrast the present invention uses a simple photosensor that produces a signal proportional to all of the light falling on a screen, instead of collecting a large number of samples of the screen illumination at once, as a CCD does (or a grid of photosensors). The CCD sensor of Sheppard relies on oversampling the screen data to create an accurate intensity map, requiring an expensive CCD camera and lens assembly.

Independent claim 5 also includes the claimed features of "modulating a pixel...at a predetermined rate..." and a photosensor, and a "synchronous demodulator for demodulating ...at a predetermined rate..." Therefore, regarding independent claims 1 and 5, the examiner has failed to make a prima facie case, because at least one of Applicant's claimed features is missing in the cited combination of Sheppard in view of Foley. Additionally, there is no suggestion or motivation to disclosed by Sheppard to replace the CCD therein with the grid of photosensors found in Foley. Hence, there is no motivation to combine the teaching of Sheppard with Foley. And finally, the Applicants achieve the unexpected results of system simplification and improved accuracy by using a synchronous demodulator.

It is believed that independent claims 1 and 5 are unobvious in light of the combination Sheppard in view of Foley. The remainder of the claims are dependent from these claims and are considered to be patentable for at least the same reasons.


Applicants have reviewed the cited art made of record, and believe that singly or in any suitable combination, they do not render Applicants' claimed invention unpatentable. It is believed that the claims

in the application are allowable over the cited art and such allowance is respectfully requested.

Should the Examiner consider that additional amendments are necessary to place the application in condition for allowance, the favor is requested of a telephone call to the undersigned counsel for the purpose of discussing such amendments.

The Commissioner is hereby authorized to charge any fees in connection with this communication to Eastman Kodak Company Deposit Account No. 05-0225.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Stephen H. Shaw", is written over a horizontal line.

Stephen H. Shaw
Attorney for Applicant(s)
Registration No. 45,404

SHS/lam
Rochester, NY 14650
Telephone: 585-477-7419
Facsimile: 585-477-4646